

The Operational Goal:

The operational goal of an EWA is to augment or complement existing prescriptive standards by using operational flexibility to reduce entrainment effects during biologically sensitive periods when standards are either inadequate or nonexistent.

There is a range of possible approaches to addressing the goal of improving conditions for fish in the Delta. The DEFT and the DNCT developed a range which included a criteria based approach, the use of a combination of criteria and flexible operations, as well as a salvage based approach. The technical teams determined that the goal of fish recovery could ultimately be achieved under any of these approaches. Subsequently, the technical team pursued what was described as the hybrid approach in order to capture the advantages of each. This approach would provide protection during predictable biologically sensitive periods as well as address real-time entrainment problems.

The Problem

Existing protective criteria are not adequate to provide necessary protection for species of concern. Existing flexibility has been underutilized given the potential water costs associated with using this flexibility. An EWA would allow for utilization of flexibility in the interest of fish protection as well as water users. blah blah blah

Initial Evaluation (lessons learned, limitations, etc.)

The exercise did not take into consideration how management of the EWA could affect attraction flows needed for upstream migrant salmon.

More water would be necessary to maintain some of the parameters (i.e., QWEST) believed by some to provide basic ecological benefits. Maintaining a zero QWEST during key periods would have been extremely costly.

The exercise did not allow for evaluating potential biological benefits or impacts of actions taken in an attempt to determine how well the EWA functioned to help fish.

Surface storage facilities allowed a great deal more flexibility than groundwater especially as far as opportunistically refilling the account. In addition, groundwater extraction rates limited use of the account.

There were benefits to holding options on water north as well as south of the Delta just as there were benefits to having access to storage north and south of the Delta.

We based operational decisions on salvage data. In reality, the CMARP would have to be closely linked to operation of the EWA in order to operate the projects in a preventative manner. Monitoring data provided through CMARP would help guide EWA decision-making and evaluating the outcome of those decisions for future benefit.